

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: HALO

Report Number: P645628

Luminaire Tested: LCR615WW9FSE020-17W-6500K

Issue Date: 3/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P645628
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-759-69)
Test Lab: INNOVATION CENTER
Issue Date: 3/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: LCR615WW9FSE020-17W-6500K
Description: LCR 6 Wall Wash
Light Source: 6500K CCT, 93 CRI LEDS
Ballast/Driver: -

Summary

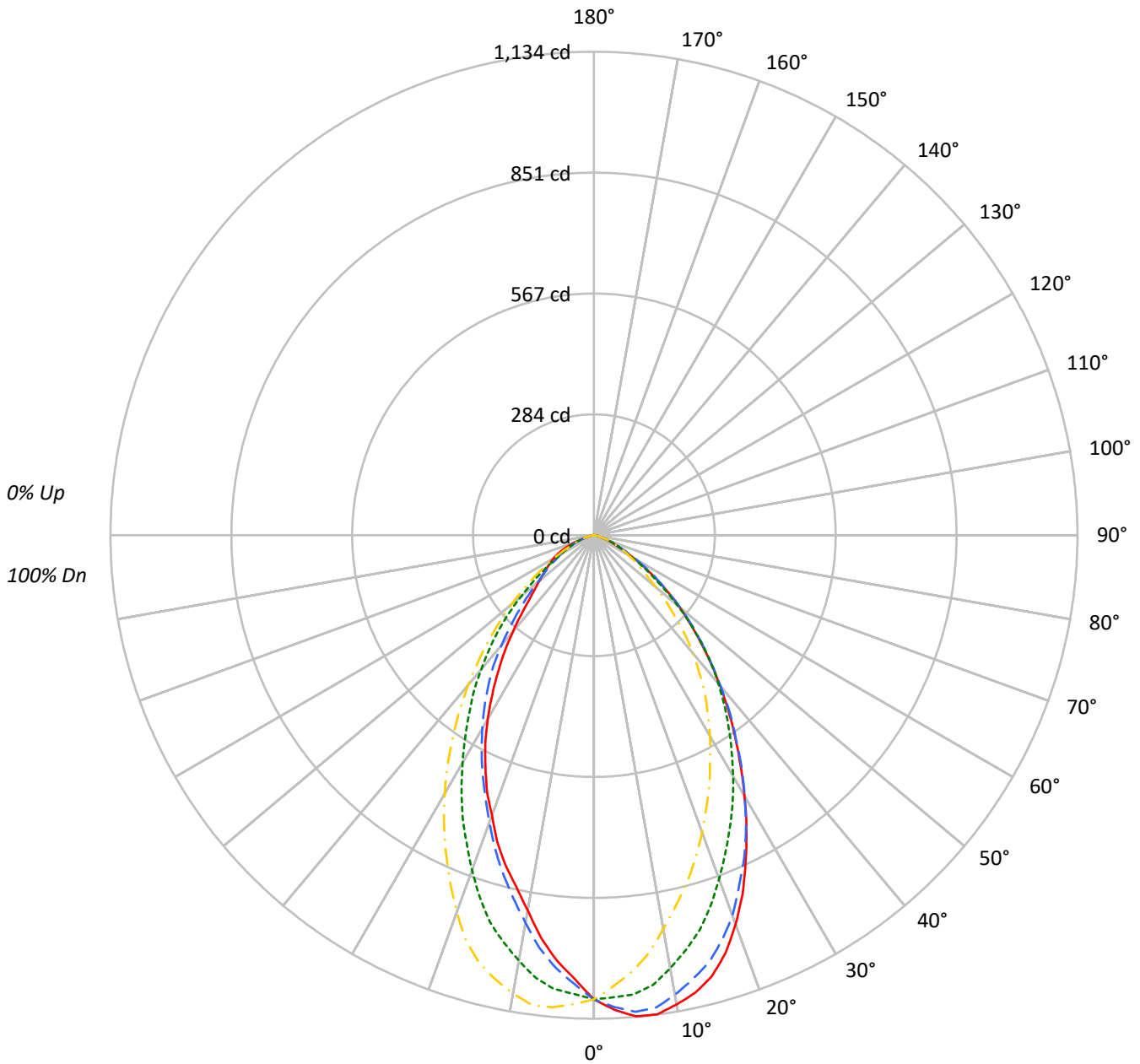
Lumens per Lamp: N/A
Luminaire Lumens: 1485.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.94 / 1.01
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - 90°-270° - - - 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	92	92	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	82	82	82	80
3	97	89	83	78	95	87	82	77	85	80	76	82	78	74	80	76	73	73	73	73	71
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	66	66	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	59	59	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	54	54	54	52
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	49	49	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	45	45	45	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	42	42	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	43	39	39	39	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	59666	59666	59666	59666
5°	62332	59470	55079	58788
10°	62195	57380	49726	56412
15°	60738	54404	45454	53371
20°	56652	50037	40779	48748
25°	50949	45656	36407	44083
30°	44735	41329	31530	39012
35°	38608	36875	26254	34104
40°	32890	32475	21125	29448
45°	27359	27584	16699	24599
50°	22387	21816	14268	18942
55°	17003	15990	12865	13878
60°	12017	11172	12017	10010
65°	7978	8237	10598	7861
70°	5402	6171	6171	6011
75°	3452	3876	3876	3876
80°	3346	3346	3346	3631
85°	3019	3019	3019	3019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 28104 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	6.8
10°-20°	262.1	17.6
20°-30°	334.5	22.5
30°-40°	317.5	21.4
40°-50°	237.9	16.0
50°-60°	140.1	9.4
60°-70°	65.7	4.4
70°-80°	21.5	1.4
80°-90°	5.4	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	696.9	46.9
0°-40°	1014.4	68.3
0°-60°	1392.4	93.8
0°-90°	1485.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1485.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1088	1088	1088	1088	1088	
5°	1133	1081	1001	1068	1133	107
15°	1070	959	801	940	1070	298
25°	842	755	602	729	842	386
35°	577	551	392	510	577	361
45°	353	356	215	317	353	273
55°	178	167	135	145	178	161
65°	62	64	82	61	62	64
75°	16	18	18	18	16	20
85°	5	5	5	5	5	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4
2.5°	1114.4	1114.4	1107.7	1097.1	1084.6	1071.1	1058.6	1048.1	1041.3	1045.2	1053.8
5°	1132.7	1131.7	1122.1	1103.8	1080.7	1052.9	1026.9	1010.6	1000.9	1002.9	1019.2
7.5°	1133.6	1128.8	1117.3	1095.2	1063.4	1025.9	988.4	964.4	951.9	955.8	976.9
10°	1117.3	1109.6	1094.2	1071.1	1030.8	985.6	937.5	903.8	893.3	898.1	923.1
12.5°	1099.0	1088.4	1067.3	1044.2	996.1	943.3	889.4	855.8	843.3	847.1	872.1
15°	1070.2	1057.7	1038.4	1005.8	958.6	900.9	843.3	812.5	800.9	800.0	822.1
17.5°	1026.9	1016.3	997.1	958.6	910.6	850.9	793.3	764.4	753.8	750.0	771.1
20°	971.1	963.4	950.0	905.8	857.7	797.1	741.3	711.5	699.0	698.1	716.3
22.5°	910.6	905.8	889.4	848.1	805.8	743.3	689.4	661.5	653.8	648.1	665.4
25°	842.3	845.2	833.6	792.3	754.8	692.3	641.3	614.4	601.9	600.0	617.3
27.5°	775.0	780.8	772.1	738.4	704.8	643.3	589.4	563.5	551.9	550.0	570.2
30°	706.7	710.6	706.7	679.8	652.9	595.2	544.2	511.5	498.1	501.0	523.1
32.5°	639.4	645.2	644.2	623.1	601.0	546.1	496.1	461.5	444.2	450.0	477.9
35°	576.9	578.8	579.8	568.3	551.0	500.0	453.8	412.5	392.3	401.9	431.7
37.5°	517.3	519.2	523.1	514.4	501.9	450.0	405.8	362.5	344.2	354.8	388.5
40°	459.6	464.4	461.5	463.5	453.8	404.8	362.5	316.3	295.2	306.7	337.5
42.5°	404.8	406.7	406.7	412.5	405.8	357.7	315.4	270.2	252.9	261.5	290.4
45°	352.9	355.8	356.7	362.5	355.8	310.6	268.3	228.8	215.4	221.1	247.1
47.5°	303.8	308.6	309.6	312.5	304.8	266.3	226.9	195.2	188.5	190.4	207.7
50°	262.5	262.5	264.4	264.4	255.8	220.2	189.4	169.2	167.3	165.4	173.1
52.5°	218.3	219.2	220.2	217.3	208.7	180.8	157.7	148.1	150.0	145.2	148.1
55°	177.9	181.7	181.7	176.9	167.3	148.1	133.7	130.8	134.6	128.8	126.0
57.5°	142.3	144.2	146.2	141.3	131.7	118.3	113.5	115.4	122.1	113.5	105.8
60°	109.6	112.5	115.4	109.6	101.9	96.2	94.2	101.0	109.6	99.0	89.4
62.5°	81.7	84.6	88.5	84.6	79.8	78.8	78.8	87.5	96.2	85.6	75.0
65°	61.5	62.5	66.3	64.4	63.5	63.5	63.5	72.1	81.7	70.2	60.6
67.5°	46.2	46.2	50.0	49.0	50.0	51.0	50.0	55.8	62.5	52.9	47.1
70°	33.7	34.6	36.5	37.5	38.5	38.5	37.5	38.5	38.5	38.5	36.5
72.5°	24.0	25.0	25.0	26.0	26.9	27.9	26.9	26.0	26.9	26.0	26.0
75°	16.3	17.3	17.3	17.3	18.3	18.3	18.3	17.3	18.3	17.3	18.3
77.5°	13.5	13.5	13.5	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
80°	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
82.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
85°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1088.4	1088.4	1088.4	1088.4	1088.4	1088.4
2.5°	1063.4	1076.9	1090.4	1100.9	1109.6	1114.4
5°	1041.3	1068.3	1092.3	1111.5	1127.9	1132.7
7.5°	1006.7	1047.1	1084.6	1111.5	1125.9	1133.6
10°	960.6	1013.4	1058.6	1091.3	1111.5	1117.3
12.5°	913.4	977.9	1033.6	1067.3	1092.3	1099.0
15°	866.3	940.4	1001.9	1038.4	1063.4	1070.2
17.5°	813.4	890.4	956.7	997.1	1020.2	1026.9
20°	758.6	835.6	906.7	940.4	968.3	971.1
22.5°	704.8	780.8	848.1	880.8	907.7	910.6
25°	653.8	728.8	788.4	821.1	848.1	842.3
27.5°	601.9	672.1	731.7	761.5	780.8	775.0
30°	554.8	616.3	672.1	700.0	712.5	706.7
32.5°	508.6	561.5	613.5	638.5	646.1	639.4
35°	461.5	509.6	557.7	576.0	581.7	576.9
37.5°	417.3	463.5	499.0	516.3	521.1	517.3
40°	375.0	411.5	445.2	458.6	463.5	459.6
42.5°	326.9	363.5	389.4	401.9	407.7	404.8
45°	279.8	317.3	337.5	348.1	354.8	352.9
47.5°	238.5	269.2	287.5	298.1	302.9	303.8
50°	196.2	222.1	239.4	252.9	256.7	262.5
52.5°	160.6	181.7	195.2	208.7	216.3	218.3
55°	131.7	145.2	157.7	170.2	176.0	177.9
57.5°	107.7	116.3	126.0	136.5	142.3	142.3
60°	88.5	91.3	99.0	107.7	110.6	109.6
62.5°	74.0	74.0	76.9	83.7	83.7	81.7
65°	60.6	60.6	60.6	63.5	62.5	61.5
67.5°	49.0	49.0	48.1	48.1	47.1	46.2
70°	37.5	37.5	36.5	34.6	34.6	33.7
72.5°	26.9	26.9	26.0	26.0	25.0	24.0
75°	18.3	18.3	18.3	17.3	17.3	16.3
77.5°	14.4	14.4	14.4	14.4	13.5	13.5
80°	10.6	11.5	11.5	10.6	10.6	10.6
82.5°	7.7	7.7	7.7	7.7	7.7	7.7
85°	4.8	4.8	4.8	4.8	4.8	4.8
87.5°	1.9	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)